

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



Copyright 1999 Responsive Database Services, Inc.
Business and Industry
Copyright 1999 Crain Communications Inc.
RCR Radio Communications Report

July 19, 1999

SECTION: Vol. 18, No. 29; Pg. 27; ISSN: 0744-0618

RDS-ACC-NO: 02064255

LENGTH: 732 words

HEADLINE: VAST unit part of PageNet's 'evolution'

BYLINE: Antony Bruno

HIGHLIGHT:

Paging Network and Computer Associates launch monitoring solution

BODY:

A monitoring solution that integrates Computer Associates Inc's **Unicenter TNG** enterprise management system with Paging Network's **wireless** capabilities has been unveiled by the two companies. The wireless capabilities are supplied by PageNet's VAST Wireless Solutions unit. Computer Associates' TNG product is a very popular system for monitoring widespread computer networks. In 1998, the company sold \$1 bil of the product. By using PageNet, the solution is wirelessly extended, so managers can make changes or answer alerts from paging devices such as the PageWriter 2000X. By launching the computer networking TNG wireless solution, PageNet has stated that VAST and Computer Associates will jointly create a like solution for Computer Associates' Unicenter TNG Fleet Management System.

After a year of development and testing, Paging Network Inc. and Computer Associates Inc. have introduced a monitoring solution that integrates CA's **Unicenter TNG** enterprise management system with **wireless** capabilities provided by PageNet's VAST **Wireless** Solutions subsidiary.

The strategic agreement between PageNet and CA was announced last year. Since then, PageNet created its Advanced Wireless Integration Group, which is dedicated to creating customized wireless solutions for corporate applications.

AWIG has been absorbed into PageNet's new VAST Wireless Solutions group and renamed VAST Solutions. The TNG solution is the first product to come out of the newly formed subsidiary.

The TNG product is a popular system for monitoring widespread computer networks, allowing centralized managers to respond to system alerts network-wide. The company sold \$1 billion of the product last year.

With PageNet, the solution is extended wirelessly, so managers may respond to alerts and make changes from paging devices like the PageWriter 2000X.

With the release of the computer networking TNG wireless solution, PageNet announced VAST and CA will work together to create a similar solution for CA's Unicenter TNG Fleet Management System. Similar to the computer networking product, PageNet intends to handle the wireless end, while CA's TNG management system provides a central management point for monitoring the fuel consumption, engine status, mileage and other data of vehicle fleets.

"We understand wireless protocol and device software. They understand data management. This is one of the many partnerships you'll see PageNet and VAST engaging in," said Mark Knickrehm, president of VAST. He used the TNG solution as an example of why PageNet created VAST-to separate PageNet's paging carrier operations from its nonpaging operations. All paging carrier functions, from one-way to ReFLEX 25-based two-way services, will continue to be run by PageNet, he said.

All noncarrier-related functions-like content, software, intellectual property rights and middleware-will be handled by VAST.

The group has three areas of interest. VAST Solutions will create wireless solutions for corporate applications by writing software extensions to handle the wireless routing issues.

"This is not traditional paging, this is software and intellectual property rights," was how Knickrehm explained the division's revenue model. "We develop a kind of technical software router that understands wireless network and device protocol. That's what we do and that's what companies like CA don't want to do."

The other two areas of VAST are the VAST Gateway-a middleware product that can route e-mail to any wireless network and device, and format the message for each-and VAST Online, PageNet's attempt to become a provider of wireless content.

The company said it would launch the information services this summer. Knickrehm said the content has been compiled, but PageNet is waiting for Motorola to release its Maui pager, an alphanumeric pager with a larger-than-normal screen capable of displaying graphics. Motorola has delayed device introduction until August.

Analysts are concerned VAST is a reshuffling effort amidst a corporate restructuring.

"I see it as an evolution of what we've been talking about for the last 18 months," Knickrehm said. "We would always like to move faster. No group of people are more frustrated than the senior management team. We're building slower than we'd like (but) ... we're not doing anything different than what we said we would."

TYPE: Journal; Fulltext; Abstract

JOURNAL-CODE: RCRRACOR

LOAD-DATE: December 21, 1999



Copyright 1998 InfoWorld Media Group
InfoWorld Daily News

June 16, 1998, Tuesday

LENGTH: 339 words

HEADLINE: CA, PageNet announce paging-based network management

BYLINE: By Blaise Zerega, InfoWorld Electric

BODY:

NEW YORK Computer Associates International and PageNet announced Tuesday at PC Expo a new service for remote network management via two-way paging. The service utilizes CA's **Unicenter TNG** enterprise management system and PageNet's **wireless** information delivery system to provide remote IT staff the ability to monitor and react, via predefined responses, to event-driven network alarms.

"This will help IT staff initiate corrective actions from their pagers," said Charles Wang, chairman and chief executive officer of CA.

At a press conference Tuesday, the companies demonstrated how the service used a two-way Motorola pager as a console to alert a remote IT technician. The demonstration simulated a full NT file server. The technician received the message and used the pager to send Unicenter TNG commands to resolve the problem. This bypasses the need for technicians to make telephone calls or enlist assistance from colleagues in the home office.

According to John Frazee, chairman, president, and chief executive officer at PageNet, the announcement reflects a union of thin-client architecture and paging message systems.

"This goes beyond personal messaging to provide business-specific information that is important to IT staff," Frazee said.

Coming on the heels of Monday's announcement from CA that its TNG software will support Windows CE devices, this announcement reflects the company's view of mobile computing as a vital part of the enterprise architecture.

"This is recognition that technologies have advanced sufficiently in the area of thin-client computing," said T. M. Ravi, vice president of marketing at CA.

The new service is available from CA and PageNet for beta testing. Pricing structures and commercial availability have not yet been determined.

Computer Associates International Inc., in Islandia, N.Y., can be reached at (516) 342-5224 or <http://www.cai.com>. Paging Network Inc., in Dallas, is at <http://www.pagenet.com>.

Blaise Zerega is a senior writer at InfoWorld.

LOAD-DATE: October 27, 1998



Copyright 1998 Business Wire, Inc.
Business Wire

March 17, 1998, Tuesday

DISTRIBUTION: Business Editors/Computer Writers

LENGTH: 1389 words

HEADLINE: BMC Software Integrates Award-Winning PATROL Product with Computer Associates' Industry-Leading Unicenter TNG

DATeline: HOUSTON

BODY:

March 17, 1998--

Customers Ability to Monitor and Manage Applications Extended by PATROLVIEW for Unicenter TNG

BMC Software, Inc. and Computer Associates International, Inc. today announced development of a "Unicentered" version of BMC Software's PATROLVIEW(TM) products, part of BMC Software's award-winning PATROL(R) Management Suite of products. The PATROLVIEW for Unicenter TNG product enables customers to seamlessly use the advanced application management and monitoring facilities of BMC Software's PATROL product suite within the robust enterprise environment of Unicenter TNG. This integration also gives IT departments already using PATROL the ability to leverage its application management capabilities by implementing them in the context of Unicenter TNG's sophisticated end-to-end management environment. "BMC Software's integration of PATROL with Unicenter TNG further extends the choices that CA is offering our clients for managing their mission-critical applications," said Yogesh Gupta, CA senior vice president of product strategy. "This latest addition to our partner solutions portfolio further strengthens Unicenter TNG's position as the best strategic choice for the management of complex enterprise computing environments -- in terms of openness, comprehensive functionality, application integration and overall value." "PATROL is widely acclaimed as the premier solution for managing the health of applications," said Leland Putterman, vice president of worldwide marketing for BMC Software. "We provide the broadest suite of solutions in the industry, the greatest functional depth and we integrate into leading framework vendors. By offering a suite of management solutions that support Unicenter TNG, we continue to address the needs of our customers by providing integrated solution sets." Tom Ellis, Arthur Andersen partner responsible for IT Infrastructure Management solutions with Andersen's Computer Risk Management practice, sees a need for offerings like PATROL, and observes that, "PATROLVIEW for Unicenter TNG will improve the overall health of enterprise applications. Clients gain a more tightly coupled application and infrastructure strategy which helps ensure the integrity and availability of data." The integrated PATROL/Unicenter TNG offering is an outgrowth of CA's "Unicentered" program that provides CA's partners with strategic support for integrating and enhancing their solutions for use with Unicenter TNG and the Unicenter TNG Framework. Unicentered partners receive a wide range of exclusive development, marketing, and training support from CA. PATROLVIEW for Unicenter TNG enables customers to monitor PATROL Agent resources through Unicenter TNG topology maps. As a result, customers can view, monitor, control and manage applications, Internet/intranet servers, middleware,

databases and other resources managed by the PATROL Management Suite from their Unicenter TNG consoles. The integration allows customers to obtain significant additional value from PATROL by applying Unicenter TNG's advanced cross-platform correlation, consolidation and automated-action capabilities to PATROL-supplied management data. PATROL users also gain the benefits of Unicenter TNG's unique capabilities such as Business Process Views; advanced user interface capabilities, including 2D, 3D and Web browser interfaces; and management from **wireless** handheld devices. The integration of PATROL and **Unicenter TNG** extends an existing partnership between the two companies. BMC Software already provides management support for CA information management solutions through the PATROL Knowledge Module(TM) for CA-OpenIngres, which provides robust monitoring and management of CA's popular relational database.

Availability and Pricing PATROLVIEW for Unicenter TNG is planned for general availability in Q2 1998 and is the latest in a series of third-party management applications to receive "Unicentered" certification. Pricing starts at \$ 2,500 (U.S. list). BMC Software solutions for CA, along with its entire product suite, are available from BMC Software and its agents and its distributors worldwide.

About the PATROL Management Suite

BMC Software's PATROL Management Suite of products optimize the service provided to users of an application by automating and centralizing the control of critical elements including data, databases, servers, middleware, applications, networks and server hardware across Unix, NT, OpenVMS, MVS, NetWare and OS/2. PATROL uses a single server-based Intelligent Autonomous Agent with an open and extensible architecture to enable BMC Software and other solution providers to develop PATROL Knowledge Modules (KM) to populate the agent with knowledge specific to the objects being managed. PATROL then automatically discovers the environment; continuously surveys the systems, identifies and corrects problems, or initiates warnings. In addition, BMC Software integrates the management and monitoring capabilities of PATROL with leading management frameworks via the PATROLVIEW products.

About Unicenter TNG

Unicenter TNG is an integrated enterprise management solution that enables organizations to manage all IT resources, encompassing heterogeneous networks, systems, applications, and databases. It provides comprehensive end-to-end enterprise management for TCP/IP, SNA, IPX/SPX and DECnet networks, and 40 platforms including desktops, Windows NT, UNIX, AS/400, NetWare and mainframe environments. Unicenter TNG is the only fully integrated management solution covering network discovery, topology, performance, events and status, security, software distribution, storage, workload, help desk, change management and other functions for traditional and distributed computing environments, as well as for the Internet and intranets. Unicenter TNG's intelligent manager/agent technology delivers highly scalable management of the entire computing environment, including hardware and software.

About BMC Software

BMC Software, Inc. (NASDAQ:BMCS) is a worldwide developer and vendor of more than 160 software solutions that improve the availability, performance and recoverability of business-critical applications and data. BMC Software is the world's 12th largest independent software vendor and a Forbes 500 company, with calendar 1997 revenues exceeding \$ 675 million. The company is headquartered in Houston with offices, distributors and agents in 50 markets worldwide. For more information on BMC Software, access the World Wide Web at www.bmc.com or call 800/841-2031 or 713/918-8800.

About Computer Associates

Computer Associates International, Inc. (NYSE:CA), with headquarters in Islandia, N.Y., is the world leader in mission-critical business software. The company develops, licenses and supports more than 500 integrated products that include enterprise computing and information management, application development, manufacturing and financial applications. CA has over 11,000 people in 160 offices in 43 countries and had revenue of \$ 4.5 billion in calendar year 1997. CA can be reached by visiting <http://www.cai.com> on the World Wide Web, emailing info@cai.com, or calling 516/342-5224. -0- Note to Editors: BMC Software, Inc. is an Equal Opportunity Employer. BMC Software, the BMC Software logos, PATROL, PATROL Knowledge Module, PATROLVIEW, and Intelligent Autonomous Agent are registered trademarks or trademarks of BMC Software, Inc. in the USA and in other select countries. (R) and (TM) indicate USA registration or USA trademark. Unicenter and Unicenter TNG Framework are registered trademarks of Computer Associates International, Inc. Other logos and product/trade names are trademarks or registered trademarks of their respective companies.

CONTACT: BMC Software

Heather Real, 713/918-1649

heather_real@bmc.com

or

Computer Associates

Bob Gordon, 516/342-2391

bobg@cai.com

Today's News On The Net - Business Wire's full file on the Internet

with Hyperlinks to your home page.

URL: <http://www.businesswire.com>

LOAD-DATE: March 18, 1998



Copyright 1998 Network World, Inc.
Network World

March 2, 1998

SECTION: NEWS; Pg. 14

LENGTH: 425 words

HEADLINE: Tivoli tools target output management

BYLINE: Jim Duffy

BODY:

Tivoli Systems, Inc. last week unveiled two products that enable users to better control data scheduling and distribution.

At the same time, management rival Hewlett-Packard Co. unveiled an enhanced version of its data backup software, and Computer Associates International, Inc. (CA) announced a partnership that could ease management of wireless devices.

Tivoli's two new products, TME 10 Output Manager and Tivoli Destiny, target output management. This is the practice of scheduling and distributing the results of application processing via printouts, fax, file transfer or electronic mail.

TME 10 Output Manager runs on the TME 10 framework, and Tivoli Destiny is a stand-alone application. Both run on Windows 95 and NT clients, and Windows NT and Unix servers, and provide centralized output control from a single console.

With TME 10 Output Manager and Tivoli Destiny, IT administrators can define rules to distribute information to output devices - faxes, printers, storage, e-mail or Web servers - located anywhere in the corporate network. The products confirm file contents, check output for accuracy and deliver output in multiple formats according to the administrators' rules.

"We're in a mainframe environment now and we're going [to] NT client/server," said Henry Buckland, director of IS at Rowe Furniture Corp., in Salem, Va. "We need to be able to manage the production queues, the priorities at which things run. [Tivoli Destiny] seems to give us every bit of that and a better scheduling capability than we had on the mainframe."

TME 10 Output Manager and Tivoli Destiny will be available in the second quarter. Pricing will be announced at that time.

Also available in the second quarter will be HP's OmniBack II 3.0 software, which lets users define backup policies and centrally control backup for Unix and Windows NT environments from an NT or Unix console. Previously, OmniBack II backup and restoral operations were separate for Unix and NT environments, and could only be administered from a Unix machine.

OmniBack II 3.0 will ship in June. The NT edition costs \$ 995 and the HP-UX version costs \$ 3,900.

Meanwhile, CA's alliance with Symbol Technologies, Inc. is aimed at delivering **wireless** management products based on CA's **Unicenter TNG** management system. The combination of **Unicenter TNG** and Symbol's Spectrum24 **wireless** mobile computers will allow users to manage their enterprises regardless of their physical location.

Tivoli: (800) 284-8654;

HP: (800) 752-0900; CA: (516) 342-5224

LOAD-DATE: March 5, 1998



Copyright 1998 CMP Media Inc.
InformationWeek

January 26, 1998

LENGTH: 373 words

HEADLINE: **Wireless**, Predictive Features Near For **TNG -- Unicenter** enhancements come amid slower client-server revenue growth for CA

BYLINE: Caryn Gillooly

BODY:

Computer Associates last week elaborated on plans to integrate **wireless** and neural networking technology into its **Unicenter TNG** enterprise-management software. But while Unicenter continues to be a growth engine for CA, the company's third-quarter financial report indicates that its client-server revenue growth has actually been slowing.

Under ROAM (Remote Operations, Administration, and Management), CA is user- testing handheld TNG devices connected via wireless technology. "This way, the person fixing the problem actually has the Unicenter console in his or her hand," says Yogesh Gupta, senior VP of technology development at CA.

Also close to completion is a performance agent for TNG, based on technology CA acquired in its recent purchase of AIWare, to perform predictive analysis on enterprise operations. CA, which already uses the agent internally, was able to predict a slowdown on its Web server, Gupta says. In another instance, the agent predicted correctly that the company's Microsoft Exchange E-mail system would go down. The agent, he says, could be available as early as this summer.

TNG customer Allegiance Corp. is interested in the predictive capability. "If they can keep track of end-user response time, that would be a big benefit to us. We do that by hand now," says Tony Navarro, manager of systems management at the McGaw Park, Ill., health-care-products supplier. While Allegiance has looked at other performance-management tools, and already has some tuning tools, tying everything into TNG is preferable, Navarro says.

CA also reported last week that its client-server business, which had been growing more than 50% year-on-year, grew only 28% in the third quarter. CA's mainframe business, where growth had slowed to single digits, increased 11%. "Most investors bought CA stock for client-server revenue, and people got concerned that the client-server business might be slowing," says Chris Mortenson, an analyst at Alex. Brown & Co., adding, "I'm assuming things will get back on track in the March quarter."

CA reported that its third-quarter net income was up 19% over a year ago, to \$339.9 million, on 18% higher revenue of \$1.2 billion.

Copyright (c) 1998 CMP Media Inc.

LOAD-DATE: September 17, 1998
